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Date of signature and deposit – February 24, 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: MILAN et al.	)	
	)	Group Art Unit: 2112
Serial No.: 09/632,466	)	
	)	Examiner: K. Huynh
Filed: August 4, 2000	)	
	)	Attorney Docket: 43376-0024
For: <u>UNIVERSAL SERIAL BUS HUB ...</u>	)	<u>(formerly 1-14402)</u>

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

REQUEST FOR CONTINUED EXAMINATION UNDER 37 CFR § 1.114

Honorable Sir:

Pursuant to § 1.114 of Title 37 of the Code of Federal Regulations, the Applicants hereby respectfully request continued examination on the above-entitled U.S. Patent Application.

Applicants respectfully request that the amendments submitted on December 23, 2004 (a copy of which is attached hereto) be entered, which comprises the submission required under 37 CFR § 1.114. No new matter is added by these amendments.

It is respectfully requested that the time for filing a response to the Final Office Action be extended one month up to and including February 25, 2005. The Commissioner is hereby authorized to charge the \$60.00 extension of time fee under 37 CFR § 1.17(a)(1) to our deposit account no. 12-2136. A Fee Transmittal form, PTO/SB/17, is enclosed herewith in duplicate authorizing a charge our Deposit Account No. 12-2136. Should any additional time be required, please consider this a conditional petition therefore, and charge our deposit account.

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03/01/2005 CCHAU1 00000057 122136 09632466

02 FC:2251 60.00 DA

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Respectfully submitted,

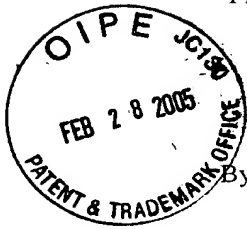
A handwritten signature in black ink, appearing to read "Michael L. Flynn", written over a horizontal line.

Michael L. Flynn  
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**CERTIFICATE OF FACSIMILE TRANSMISSION UNDER 37 CFR 1.8**

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DECEMBER 23, 2004

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By William J. Clemens  
William J. Clemens

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: MILAN	)	
	)	Group Art Unit: 2112
Serial No.: 09/632,466	)	
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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**AMENDMENT UNDER 37 CFR 1.116**

Honorable Sir:

**AMENDMENT**

Please amend the above-identified application as indicated on the following pages.

Respectfully submitted,

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## AMENDMENTS TO THE CLAIMS

Claims 1-34 (Cancelled)

35. (New) A wireless system for operating a computer having a USB port comprising:  
a remote wireless peripheral device having a circuit for generating device information causing associated operations to be performed by the computer and an RF transmitter connected to said circuit for transmitting a wireless signal including said device information, said circuit and said RF transmitter being integral to said peripheral device, said RF transmitter being the sole means for communicating said device information from said peripheral device and said peripheral device not having any USB communication capability, said peripheral device being one of a keyboard, a mouse and a joystick; and  
a Universal Serial Bus (USB) hub including an upstream USB port adapted to be connected to the computer, and a hub controller connected between said data reception circuit and said upstream USB port whereby when said upstream USB port is connected to the USB port of the computer and said peripheral device generates said wireless signal to said data reception circuit, said hub controller converts said wireless signal to a USB data signal and passes said USB data signal to said upstream port for causing the associated operations to be performed by the computer.

36. (New) The wireless system according to Claim 35 wherein said peripheral device is a keyboard and including a mouse having a circuit for generating device information causing associated operations to be performed by the computer and an RF transmitter connected to said circuit for transmitting a wireless signal including said device information, said circuit and said RF transmitter being integral to said mouse, said RF transmitter being the sole means for communicating said device information from said mouse and said mouse not having any USB communication capability, and said hub having means to distinguish between said keyboard wireless signal and said mouse wireless signal.

37. (New) A wireless system for operating a computer having a USB port comprising:  
a remote wireless peripheral device having a circuit for generating device information causing associated operations to be performed by the computer and an RF transmitter connected to said circuit for transmitting a wireless signal including said device information, said circuit and said RF transmitter being integral to said peripheral device, said RF transmitter being the sole means for communicating said device information from said peripheral device and said peripheral device not having any USB communication capability; and  
a Universal Serial Bus (USB) hub including an upstream USB port adapted to be connected to the computer, and a hub controller connected between said data reception circuit and said upstream USB port whereby when said upstream USB port is connected to the USB port of the computer and said peripheral device generates said wireless signal to said data reception circuit, said hub controller converts said wireless signal to a USB data signal and passes said USB data signal to said upstream port for causing the associated operations to be performed by the computer.

38. (New) The wireless system according to Claim 37 wherein said data reception circuit further includes an RF receiver for receiving said wireless signal from said peripheral device.

39. (New) The wireless system according to Claim 38 wherein said data reception circuit further includes a signal discriminator connected between said RF receiver and said hub controller for receiving said wireless signal from said RF receiver and presenting said device information in said wireless signal to said hub controller.

40. (New) The wireless system according to Claim 39 wherein said hub controller further includes a serial interface engine connected to said signal discriminator for converting said device information into USB format to form said USB data signal.

41. (New) The wireless system according to Claim 37 further including at least two additional remote wireless peripheral devices and at least two additional data reception circuits, each of said data reception circuits corresponding to an associated one of said peripheral devices, wherein each of said data reception circuits includes an RF receiver for receiving a unique wireless signal from said associated one of said peripheral devices.

41. (New) The wireless system according to Claim 37 wherein said RF receiver is a DSSS BPSK modulation receiver.

42. (New) The wireless system according to Claim 37 including at least one conventional downstream USB port in said hub and connected to said hub controller for connection to a USB peripheral device.

43. (New) A wireless Universal Serial Bus (USB) hub and remote wireless peripheral devices for communication with a computer having a USB port comprising:

at least two remote wireless peripheral devices each having a circuit for generating device information related to operations performed by said peripheral device and an RF transmitter connected to said circuit for transmitting a wireless signal including said device information, said circuits and said RF transmitters being integral to said peripheral devices, said RF transmitters being the sole means for communicating said device information from said peripheral devices and said peripheral devices not having any USB communication capability, said at least two remote peripheral devices including a keyboard and a mouse;

a data reception circuit for receiving said wireless signals from said RF transmitters;

an upstream USB port adapted to be connected to the computer; and

a hub controller connected between said data reception circuit and said upstream USB port whereby when said upstream USB port is connected to the USB port of the computer and said peripheral devices generate said wireless signals to said data reception circuit, said hub controller converts each of said wireless signals to a USB data signal and passes said USB data signal to said upstream port for

communication of said device information to the computer for controlling operations of the computer.

### REMARKS

Applicant cancelled Claims 24-34 and added Claims 35-43. No new matter is added by these amendments.

#### **The Rejections:**

The Examiner rejected Claims 24-27, 30, and 32-34 under 35 U.S.C. § 103(a) as being unpatentable over the U.S. Patent Publication No. 2003/0043771 of Mizutani et al. in view of the U.S. Patent Publication No. 2001/0014102 of Mattingly et al.

With respect to independent Claims 24 and 32, the Examiner stated that Mizutani et al. discloses all the limitations except the peripheral device not having any USB communication capability. However, the Examiner noted that Mattingly et al. discloses that the hub 102 is providing wireless communications to a plurality of users, through devices 104a-n that can include any integral device that is configured for accessing a computer system wirelessly and does not include USB capability. According to the Examiner, it would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate Mattingly et al.'s teaching into Mizutani et al.'s system so as to implement wireless peripherals without use of USB capability since Mattingly et al. shows such devices to be equivalent and Mizutani et al. suggests that any device may be used.

The Examiner rejected Claims 28-29 and 31 under 35 U.S.C. § 103(a) as being unpatentable over Mizutani et al. in view of Mattingly et al.

With respect to Claim 31, the Examiner stated that Mizutani et al. discloses all the limitations except the 2<sup>nd</sup> remote wireless peripheral devices and it would have been obvious to one having ordinary skills in the art at the time the invention was made to have the 2<sup>nd</sup> remote peripheral device since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

#### **Applicant's Arguments:**

The Mizutani et al. publication shows a wireless device and a method for state change wireless transmission. A computer (1) has a USB connector (11) connected to a USB interface unit A (15) of a wireless hub (3). The wireless hub (3) communicates via a wireless transceiver



(21) with a wireless transceiver B (23) in a wireless port (5). The wireless port (5) includes a USB interface unit B (27). A USB peripheral device (7) has a USB connector (29) connected to the USB interface unit B (27). Thus, the wireless hub (3) and the wireless port (5) cooperate to make possible wireless communication between the computer (1) and the USB device (7). Clearly the USB device (7) is a conventional unit designed to be connected to the computer (1) in a usual manner utilizing the USB connectors (11, 29) and a USB cable. The wireless port (5) is a separate unit designed to connect to the USB connector of any conventional USB device to enable RF communication. Thus, the USB device (7) has only USB communication capability and the wireless port (5) has both USB and wireless communication capabilities.

As admitted by the Examiner, the Mizutani et al. publication does not show or suggest a peripheral device not having any USB communication capability as defined by Applicant's claims. However, the new ground of rejection incorporates Mattingly et al. which, according to the Examiner, "evidences the equivalence of integral wireless communication peripherals."

Mattingly et al. concerns a computer telephony system that supports a plurality of user access devices and/or is connected to multiple external telephone lines. The devices 104a-n are not computer peripherals, but include personal communication devices such as wireless telephones, pagers, portable computers and PDA's. Thus, the Mattingly et al. devices 104a-n are not the equivalent of and can not be substituted for the Mizutani et al. USB device (7) and wireless port (5) combination.

Applicant's new independent Claim 35 defines the peripheral device as "generating device information causing associated operations to be performed by the computer" and as being one of a keyboard, a mouse and a joystick. Applicant's new independent Claim 37 defines the peripheral device as "generating device information causing associated operations to be performed by the computer". Applicant's new independent Claim 43 defines the at least two peripheral devices as each "generating device information related to operations performed by said device", as including a keyboard and a mouse, and as "controlling the operations of the computer" with the device information.

There is no combination of Mizutani et al. and Mattingly et al. that results in the claimed hub and one or more peripheral devices that communicate solely by RF transmission and wherein the hub can be connected to the USB port of a computer. Applicant has rewritten the cancelled

claims to clarify the differences between the Mizutani et al. system and Applicant's invention and between the Mattingly et al. system and Applicant's invention.

The Examiner cited but did not rely upon U.S. Patent No. 6,778,519 issued to Harrell et al. Applicant reviewed this patent and found it to be no more pertinent than the prior art relied upon by the Examiner in his rejections.

In view of the amendments to the claims and the above arguments, Applicant believes that the claims of record now define patentable subject matter over the art of record. Accordingly, an early Notice of Allowance is respectfully requested.